



**FEDERAL RAILROAD
ADMINISTRATION**

FRA GRADE CROSSING SAFETY PROGRAM

- There has been a significant improvement in highway-rail grade crossing safety over the last ten years. Comparing 1993 data to 2003 data shows:
 - ▶ 41% reduction in the number of collisions (4,892 to 2,500)
 - < 48% reduction in the number of fatalities (626 to 325)
 - < 51% reduction in the accident rate (number of collisions per 1,000,000 train miles) despite a 22% increase in the number of train miles during the time period.
- FRA has 25 employees that work full-time to reduce the number of grade crossing collisions and trespassing incidents that together account for 95% of all rail-related fatalities. 16 of these are located across the country, working with state and local governments, railroads and other safety partners.
- FRA created a computer software program that may be used to identify locations where grade crossings can be closed or consolidated, or where warning devices should be upgraded. This program can be used from FRA's web site or provided on a CD-ROM.
- FRA worked with the Department and other safety partners to develop a report entitled "Guidance on Traffic Control Devices at Highway-Rail Crossings" that provides guidance to traffic engineers in the selection of appropriate traffic control devices or other applications to improve safety at crossings. That report also provides the first nationally recognized criteria for crossing sight distances (providing guidance for removal of brush and other sight obstructions).
- In 2002, FRA issued a study that was requested by Congress that identified the ten crossings in each state that had the greatest potential for being the site of a fatal collision. The report outlined mitigation efforts identified by states including a whole range of initiatives that were as simple as replacing cross bucks and adding advanced warning signs for \$2,000 or as complex and expensive as \$1 billion to grade separate an entire rail corridor.
- The Department issued the **Secretary's 2004 Action Plan** to improve highway-rail crossing safety and trespass prevention efforts. The Plan stresses nine initiatives that carry forward the principal themes of the original action plan, while providing a more specific focus on important work that remains to be accomplished.

Outreach

- FRA works closely with our partner Operation Lifesaver, Inc., and its 3000+ volunteer presenters to promote grade crossing safety and trespass prevention messages to the public at large. Presentations are made at schools, workplaces, community centers, state/county fairs, shopping malls, public safety conferences and numerous other venues.
Operation Lifesaver, Inc., receives \$1.725M in Federal grants to facilitate its crossing safety efforts. (FRA - \$1.025M, FHWA - \$500K, FTA - \$200K)
- FRA has instituted a law enforcement liaison program to provide funding for an officer to work one week per month to promote the importance of crossing safety among state and local law enforcement officials. Currently four of the eight FRA regions have an officer in place.
- FRA continuously conducts targeted outreaches to various audiences with special emphasis on the motor carrier, law enforcement and judicial communities. One example of this effort is the creation of a major

partnership with SWIFT Trucking, the nation's second largest motor carrier company, to include crossing safety in the training curriculum for the approximately 15,000 drivers that are trained each year.

- FRA developed an innovative major outreach to migrant farm workers in central California and has expanded it to other regions in the country with significant farming communities and Spanish-speaking populations.
- FRA is working with the Illinois Commerce Commission (ICC) to conduct a regional pilot project to assess the baseline effectiveness of educational and enforcement efforts to improve vehicular and pedestrian safety. This research study will provide FRA with analytical data of the effects educational and enforcement efforts have on driver and pedestrian behavior at crossings
- FRA successfully worked with Frito Lay and Albertson's Foods, a major grocery retailer in the Northwest, to co-sponsor a rail safety initiative that targeted Washington, Oregon, and northern Idaho to heighten awareness of the dangers of trespassing on railroads. Posters were displayed at the Frito Lay Display at 138 Albertson's stores and appeared in 3.3 million flyers.
- FRA has developed a Toll-Free Emergency Notification System that enables motorists to report emergencies at crossings and is the final stages of testing the system on a statewide (TX) and regional (SEDA-COG in PA) basis.
- FRA partnered with the National Institute of Safety and Health and Operation Lifesaver in developing a four-page bulletin that provides information on the importance of firefighters taking appropriate safety precautions around railroad tracks.
- FRA sponsored the 2003 Highway-Rail Grade Crossing Research Needs Workshop at the Volpe National Transportation System Center to discuss engineering and design needs, human factors issues (driver behavior), and enforcement needs in order to address rail safety demands for the future.
- FRA funded the North Carolina "Sealed Corridor" project that used a variety of improvements including traffic channelization, long gate arms, four quadrant gates and other techniques to improve safety. Initial results indicate that during a five year period that five lives had been saved due to improvements at 52 crossings between Charlotte and Greensboro, NC.

Regulations

- FRA issued several regulations to improve crossing safety. In 1995, regulations were issued that required the routine maintenance, inspection and testing of automatic warning devices at crossings. In 1997, locomotives moving over crossings at speeds of 20 mph or greater were required to be equipped with additional lights (ditch lights) to improve motorists ability to see the train.
- Effective December 31, 1997, FRA also required locomotives operating in excess of 20 mph to be equipped with auxiliary alerting lights or "ditch lights." Together with the headlight, this arrangement creates a distinctive triangular signature and gives the motorist a much better chance to identify an approaching train at a passively signed grade crossing and to judge its closing speed. In excess of 20,000 locomotives are so equipped, and FRA believes that this requirement has contributed materially to the reduction of crossing collisions.
- FRA is conducting final analysis of comments on a proposed rule that would require 1.3 million locomotives and freight cars to be equipped with retroreflective material on their sides to help prevent a portion of the almost 25% of crossing accidents where motorists actually drive into the sides of freight trains. Final action: before the end of 2004.